

**COHEN, PONTANI,  
LIEBERMAN & PAVANE**

551 Fifth Avenue (Suite 1210)  
New York, New York 10176  
Tel: 212-687-2770  
Fax: 212-972-5487

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RE: U.S. Patent Application Serial No. 10/570,053

Title: Iterative decoding and equalizing for high speed communications on multiple antenna channels during transmission and reception

Our File No. 33901-194PUS

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By Express Mail  
No. EV028043108USCOMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY  
(Includes Reference to PCT International Applications)

Attorney's Docket No.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**ITERATIVE DECODING AND EQUALIZING METHOD FOR HIGH SPEED COMMUNICATIONS ON  
MULTIPLE ANTENNA CHANNELS DURING TRANSMISSION AND RECEPTION**

the specification of which (check only one item below)

 is attached hereto was filed as United States application

Serial No.

on

and was amended

on \_\_\_\_\_ (if applicable).

 was filed as PCT international applicationNumber PCT/FR20/002104

on August 6, 2004

and was amended under PCT Article 19

on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

## PRIOR FOREIGN/PCT APPLICATIONS AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

Country (if PCT, indicate "PCT")	Application Number	Date of Filing (day, month, year)	Priority Claimed Under 35 U.S.C. 119	
France	0310290	29/08/2003	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
			<input type="checkbox"/> YES	<input type="checkbox"/> NO
			<input type="checkbox"/> YES	<input type="checkbox"/> NO
			<input type="checkbox"/> YES	<input type="checkbox"/> NO

By Express Mail  
No. EV028043108US**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY**  
(Includes Reference to PCT International Applications)

Attorney's Docket No.

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) at Cohen, Pontani, Lieberman & Pavane to prosecute this application and transact all business in the Patent and Trademark Office connected therewith

Customer number 27799

Send correspondence to Cohen, Pontani, Lieberman &amp; Pavane at the address for the following customer Number: 27799

Direct Telephone calls to:  
(name and telephone number)  
Thomas Langer  
(212) 687-2770

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

2 0 1	FULL NAME OF INVENTOR	FAMILY NAME <b>VISOZ</b>	FIRST GIVEN NAME Raphaël	SECOND GIVEN NAME
	RESIDENCE, CITIZENSHIP	CITY <b>ISSY LES MOULINEAUX</b>	STATE OR FOREIGN COUNTRY France	COUNTRY OF CITIZENSHIP France
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 28 Boulevard Gambetta	CITY <b>ISSY LES MOULINEAUX</b>	STATE & ZIP CODE/COUNTRY France 92130
2 0 2	FULL NAME OF INVENTOR	FAMILY NAME <b>CHTOUROU</b>	FIRST GIVEN NAME Sami	SECOND GIVEN NAME
	RESIDENCE, CITIZENSHIP	CITY <b>PARIS</b>	STATE OR FOREIGN COUNTRY France	COUNTRY OF CITIZENSHIP France
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 9 Rue Esquirol	CITY <b>PARIS</b>	STATE & ZIP CODE/COUNTRY France 75013
2 0 3	FULL NAME OF INVENTOR	FAMILY NAME <b>BERTHET</b>	FIRST GIVEN NAME Antoine	SECOND GIVEN NAME
	RESIDENCE, CITIZENSHIP	CITY <b>CHATENAY MALABRY</b>	STATE OR FOREIGN COUNTRY France	COUNTRY OF CITIZENSHIP France
	POST OFFICE ADDRESS	POST OFFICE ADDRESS 72 Avenue Jean Jaurès Bât.A, Esc.3	CITY <b>CHATENAY MALABRY</b>	STATE & ZIP CODE/COUNTRY France 92290

**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY**  
(Includes Reference to PCT International Applications)

Attorney's Docket No.

SIGNATURE OF INVENTOR 201

DATE January 12, 2006

SIGNATURE OF INVENTOR 202

DATE January 12, 2006

SIGNATURE OF INVENTOR 203

DATE January 12, 2006



## UNITED STATES PATENT AND TRADEMARK OFFICE

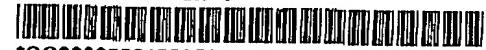
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/570,053	02/28/2006	2631	900	33901-194PUS	2	15	2

27799  
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 NEW YORK, NY 10176

CONFIRMATION NO. 3049

## FILING RECEIPT



\*OC000000019885857\*

Date Mailed: 08/04/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Raphaël Visoz, Issy Les Moulineaux, FRANCE;  
 Sami Chtourou, Paris, FRANCE;  
 Antoine Berthet, Chatenay Malabry, FRANCE;  
 France Telecom, Paris, FRANCE.

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AUG 10 2006

## Assignment For Published Patent Application

France Telecom, Paris, FRANCE

Power of Attorney: The patent practitioners associated with Customer Number 27799.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/FR04/02104 08/06/2004

## Foreign Applications

FRANCE 0310290 08/29/2003

If Required, Foreign Filing License Granted: 08/03/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/570,053**

Projected Publication Date: 11/09/2006

Non-Publication Request: No

P078304800

Early Publication Request: No

**Title**

Iterative decoding and equalizing method for high speed communications on multiple antenna channels during transmission and reception

*Equalizing High*

**Preliminary Class**

375

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Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process simplifies the filing of patent applications on the same invention in member countries, but does not result in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

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For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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